

# Reassessing acceptability judgments: methodology, models, and alternatives

Constantin Freitag

Universität Konstanz

23. September 2016



This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no. 613465.

In this talk I'd like to

- ▶ give you an overview of available acceptability judgment paradigms
- ▶ raise some questions concerning the interpretation of judgments
- ▶ provide a tool for evaluate predictions of possible results
- ▶ suggest some add-ons/alternatives to simple acceptability judgments

## Grammaticality

Grammaticality describes the property of a linguistic structure as belonging to a set of elements described/defined by a given grammar.

## Acceptability

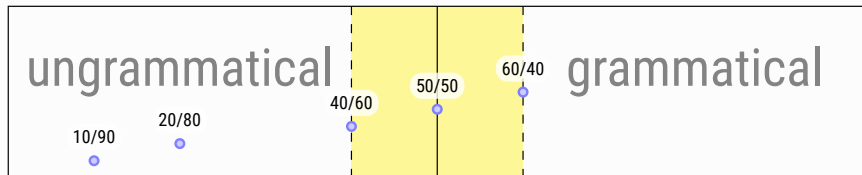
Acceptability describes the intuition of (native) speakers expressing the ranking of a linguistic structure relative to a set of (possibly implicit) linguistic entities.

## Closed scales

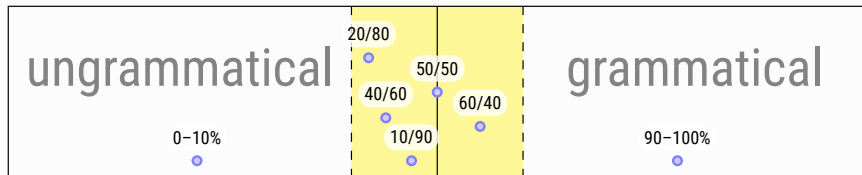
- ▶ Binary judgments → nominal scale/ordinal scale
- ▶ categorial judgments → ordinal scale  
x point scale
- ▶ continuous judgments → ordinal scale/interval scale

## (Semi) Open scales

- ▶ Magnitude estimation → ratio scale
- ▶ Thermometer judgments → ordinal scale/interval scale
- ▶ Origo judgments → ordinal scale/interval scale

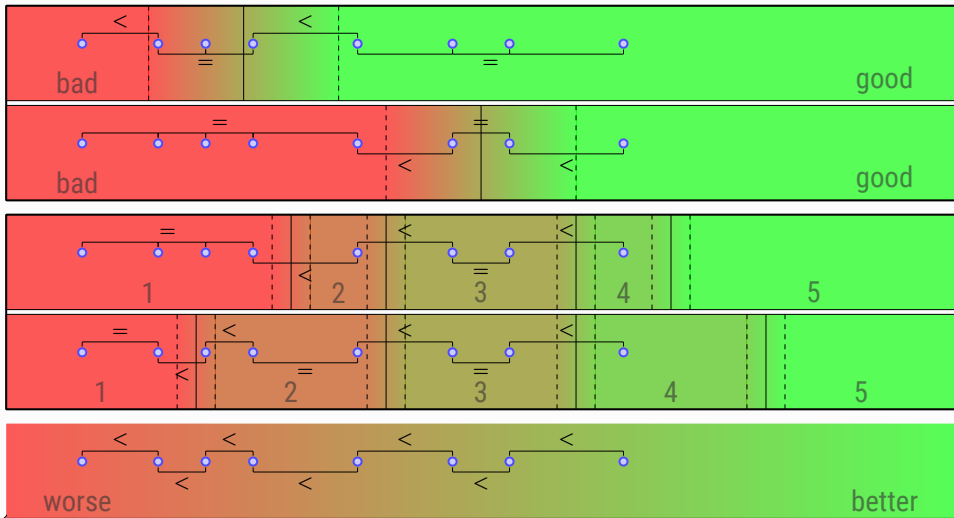


- ▶ If a structure is highly ungrammatical (90%) why would it in 10 out of 100 speakers/stimuli turn out as grammatical?
- ▶ What would this imply? Large speaker/item variation?



- ▶ If a structure is highly ungrammatical (90%) why would it in 10 out of 100 speakers/stimuli turn out as grammatical?
- ▶ What would this imply? Large speaker/item variation?
- ▶ More likely that 10 data points (short) below the threshold, say 45%, and 90 data points are (shortly) above the threshold, say 55%.
- ▶ Generally you would need some measure of variance to decide where most of the point may lie. → not available

# The acceptability space



- ▶ The influence of language processing on acceptability is not deniable (landscape for grammatical structures to emerge)
- ▶ grammatically acceptable & psychologically unacceptable (Miller and Isard, 1964, p. 294)
  - (1) The man [who said [that a cat [that the dog chased] killed the rat]] is a liar.
- ▶ Influence of context (Crain and Steedman, 1985; Fanselow et al., 2008)
- ▶ How can we estimate/exclude these other factors?



## Time pressure

- ▶ Speeded acceptability judgment
- ▶ Speed accuracy trade-off procedure (SAT) (Wickelgren, 1977; McElree, 2000)
  
- ▶ Time pressure may gives you an indication for the processing difficulty.
- ▶ Participant with greater processing abilities will judge structure acceptable and participant with smaller abilities will judge them unacceptable.

## Additional measures

- ▶ confidence: How sure are you?
- ▶ plausibility

Especially for non-normative populations (children, learners, impaired population) comprehension or production task may provide more insights than acceptability judgments

- ▶ Sentence matching task
- ▶ Production tasks
- ▶ Elicited imitation tasks
- ▶ act-out-tasks

Ask and try to answer the following questions when you are designing your experiment:

- ▶ Which task is best suited for my material/population?
- ▶ What (kind of results) do I expect?
- ▶ What kind of data will I get?
- ▶ How can I analyze this data?
- ▶ What do the result possibly explain?

# Thanks for your attention

How would you rate this presentation?

waste of time     boring     not bad     interesting     helpful